

SEQ ID NO	Sequence
1	Ac-HSDAVFTDQYTRLRKQVAAKKYLQSIKQKRY
2	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKQKRY
3	Ac-HSDAVFTDQYTRLRKQVAAKKYLQSIKQK
4	Ac-HTEAVFTDQYTRLRKQVAAKKYLQSIKQKRY
5	Ac-HSDAVFTDQYTRLRKQLAVKKYLQDIKQGGT
6	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKQKR
7	Ac-HSDAVFTDQYTRLRKQLAAKKYLQTIKQKRY
8	Ac-HSDAVFTDQYTRLRKQMAAKKYLQTIKQKRY
9	Ac-HSDAVFTDQYTRLRKQMAAHKYLQSIKQKRY
10	Ac-HSDAVFTDQYTRLRKQMAAKHYLQSIKQKRY
11	Ac-HSDAVFTDQYTRLRKQMAKKYLQSIKQKR
12	Ac-HSDAVFTDQYTRLRKQMAKKYLQSIKQKR
13	Ac-HSDAVFTDQYTRLRKQMARKKYLQSIKQKR
14	Ac-HSDAVFTDQYTRLRKQMASKKYLQSIKQKR
15	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI PQKR
16	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI QQKR
17	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI RQKR
18	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQRR
19	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKA
20	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKF
21	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKH
22	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKI
23	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKK
24	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKL
25	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKM
26	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKP
27	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKQ
28	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKS
29	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKT
30	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKV
31	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKW
32	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI KQKY
33	Ac-HSDAVFTDQYTRLRKQMAKKYLQSI KQRI
34	Ac-HSDAVFTDQYTRLRKQMAKKYLQSI KQRI
35	Ac-HSDAVFTDQYTRLRKQMASKKYLQSI KQRI
36	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI PQRI
37	Ac-HSDAVFTDQYTRLRKQMASKKYLQSI RQRI

FIG. 1a

SEQ ID NO	Sequence
38	Ac-HSDAVFTDNYTLRKQVAAKKYLQSIKQKRY
39	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKRY
40	Ac-HSDAVFTDNYTLRKQVAAKKYLQSIKQK
41	Ac-HTEAVFTDNYTLRKQVAAKKYLQSIKQKRY
42	Ac-HSDAVFTDNYTLRKQLAVKKYLQDIKQGGT
43	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKR
44	Ac-HSDAVFTDNYTLRKQLAAKKYLQTIKQKRY
45	Ac-HSDAVFTDNYTLRKQMAAKKYLQTIKQKRY
46	Ac-HSDAVFTDNYTLRKQMAAHKYLQSIKQKRY
47	Ac-HSDAVFTDNYTLRKQMAAKHYLQSIKQKRY
48	Ac-HSDAVFTDNYTLRKQMAGKKYLQSIKQKR
49	Ac-HSDAVFTDNYTLRKQMAKKKYLQSIKQKR
50	Ac-HSDAVFTDNYTLRKQMARKKYLQSIKQKR
51	Ac-HSDAVFTDNYTLRKQMASKKYLQSIKQKR
52	Ac-HSDAVFTDNYTLRKQMAAKKYLQSI PQKR
53	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIQQR
54	Ac-HSDAVFTDNYTLRKQMAAKKYLQSI RQKR
55	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQRR
56	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKA
57	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKF
58	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKH
59	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKI
60	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKK
61	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKL
62	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKM
63	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKP
64	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKQ
65	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKS
66	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKT
67	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKV
68	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKW
69	Ac-HSDAVFTDNYTLRKQMAAKKYLQSIKQKY
70	Ac-HSDAVFTDNYTLRKQMAGKKYLQSIKQRI
71	Ac-HSDAVFTDNYTLRKQMAKKKYLQSIKQRI
72	Ac-HSDAVFTDNYTLRKQMASKKYLQSIKQRI
73	Ac-HSDAVFTDNYTLRKQMAAKKYLQSI PQRI
74	Ac-HSDAVFTDNYTLRKQMASKKYLQSI RQRI

FIG. 1b

SEQ ID NO	Sequence
75	Ac-HSDAVFTDQYTRLRKQVAAKKYLQSIKNKRY
76	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKRY
77	Ac-HSDAVFTDQYTRLRKQVAAKKYLQSIKNK
79	Ac-HTEAVFTDQYTRLRKQVAAKKYLQSIKNKRY
80	Ac-HSDAVFTDQYTRLRKQLAVKKYLQDIKNGGT
81	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKR
82	Ac-HSDAVFTDQYTRLRKQLAAKKYLQTIKNKRY
83	Ac-HSDAVFTDQYTRLRKQMAAKKYLQTIKNKRY
84	Ac-HSDAVFTDQYTRLRKQMAAHKYLQSIKNKRY
85	Ac-HSDAVFTDQYTRLRKQMAAKHYLQSIKNKRY
86	Ac-HSDAVFTDQYTRLRKQMAGKKYLQSIKNKR
87	Ac-HSDAVFTDQYTRLRKQMAKKKYLQSIKNKR
88	Ac-HSDAVFTDQYTRLRKQMARKKYLQSIKNKR
89	Ac-HSDAVFTDQYTRLRKQMASKKYLQSIKNKR
90	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI PNKR
91	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIQNKR
92	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI RNKR
93	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNRR
94	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKA
95	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKF
96	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKH
97	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKI
98	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKK
99	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKL
100	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKM
101	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKP
102	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKQ
103	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKS
104	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKT
105	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKV
106	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKW
107	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSIKNKY
108	Ac-HSDAVFTDQYTRLRKQMAGKKYLQSIKNRI
109	Ac-HSDAVFTDQYTRLRKQMAKKKYLQSIKNRI
110	Ac-HSDAVFTDQYTRLRKQMASKKYLQSIKNRI
111	Ac-HSDAVFTDQYTRLRKQMAAKKYLQSI PNRI
112	Ac-HSDAVFTDQYTRLRKQMASKKYLQSI RNRI

FIG. 1c

SEQ ID NO	Sequence
113	Ac-HSDAVFTDQYTRLRKQVAACKYLSIKQKRYC-PEG
114	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKRYC-PEG
115	Ac-HSDAVFTDQYTRLRKQVAACKYLSIKQKRC-PEG
116	Ac-HTEAVFTDQYTRLRKQVAACKYLSIKQKRYC-PEG
117	Ac-HSDAVFTDQYTRLRKQLAVKKYLQDIKQGGTC-PEG
118	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKRC-PEG
119	Ac-HSDAVFTDQYTRLRKQLAAKKYLQTIKQKRYC-PEG
120	Ac-HSDAVFTDQYTRLRKQMAACKYLQTIKQKRYC-PEG
121	Ac-HSDAVFTDQYTRLRKQMAAHKYLQSIKQKRYC-PEG
122	Ac-HSDAVFTDQYTRLRKQMAACKHYLSIKQKRYC-PEG
123	Ac-HSDAVFTDQYTRLRKQMAGKKYLSIKQKRC-PEG
124	Ac-HSDAVFTDQYTRLRKQMAKKYLSIKQKRC-PEG
125	Ac-HSDAVFTDQYTRLRKQMARKKYLSIKQKRC-PEG
126	Ac-HSDAVFTDQYTRLRKQMAKKYLSIKQKRC-PEG
127	Ac-HSDAVFTDQYTRLRKQMAACKYLSIPQKRC-PEG
128	Ac-HSDAVFTDQYTRLRKQMAACKYLSIIQKRC-PEG
129	Ac-HSDAVFTDQYTRLRKQMAACKYLSIRQKRC-PEG
130	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQRRRC-PEG
131	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKAC-PEG
132	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKFC-PEG
133	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKHC-PEG
134	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKIC-PEG
135	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKCC-PEG
136	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKLC-PEG
137	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKMC-PEG
138	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKPC-PEG
139	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKQC-PEG
140	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKSC-PEG
141	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKTC-PEG
142	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKVC-PEG
143	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKWC-PEG
144	Ac-HSDAVFTDQYTRLRKQMAACKYLSIKQKYC-PEG
145	Ac-HSDAVFTDQYTRLRKQMAGKKYLSIKQRIC-PEG
146	Ac-HSDAVFTDQYTRLRKQMAKKYLSIKQRIC-PEG
147	Ac-HSDAVFTDQYTRLRKQMAKKYLSIKQRIC-PEG
148	Ac-HSDAVFTDQYTRLRKQMAACKYLSIPQRIC-PEG
149	Ac-HSDAVFTDQYTRLRKQMAKKYLSIRQRIC-PEG

FIG. 1d

SEQ ID NO	Sequence
150	HSDGIFTDSYSRYRKQMAVKKYLAAVLGKRYKQRVKNK
151	HSDGIFTDSYSRYRKQMAVKKYLAAVL
152	HSDAVFTDNYTRLRKQMAVKKYLSILN
153	HSDAVFTDQYTRLRKQVAACKYLQSIKQKRY
154	Ac-HTDAVFTDQYTRLRKQVAACKYLQSIKQKRY
155	HSDAVFTDQYTRLRKQVAACKYLQSIKQKRYC-PEG
156	Ac-HTDAVFTDQYTRLRKQVAACKYLQSIKQKRYC-PEG

FIG. 1e

Stability against DPP IV Cleavage

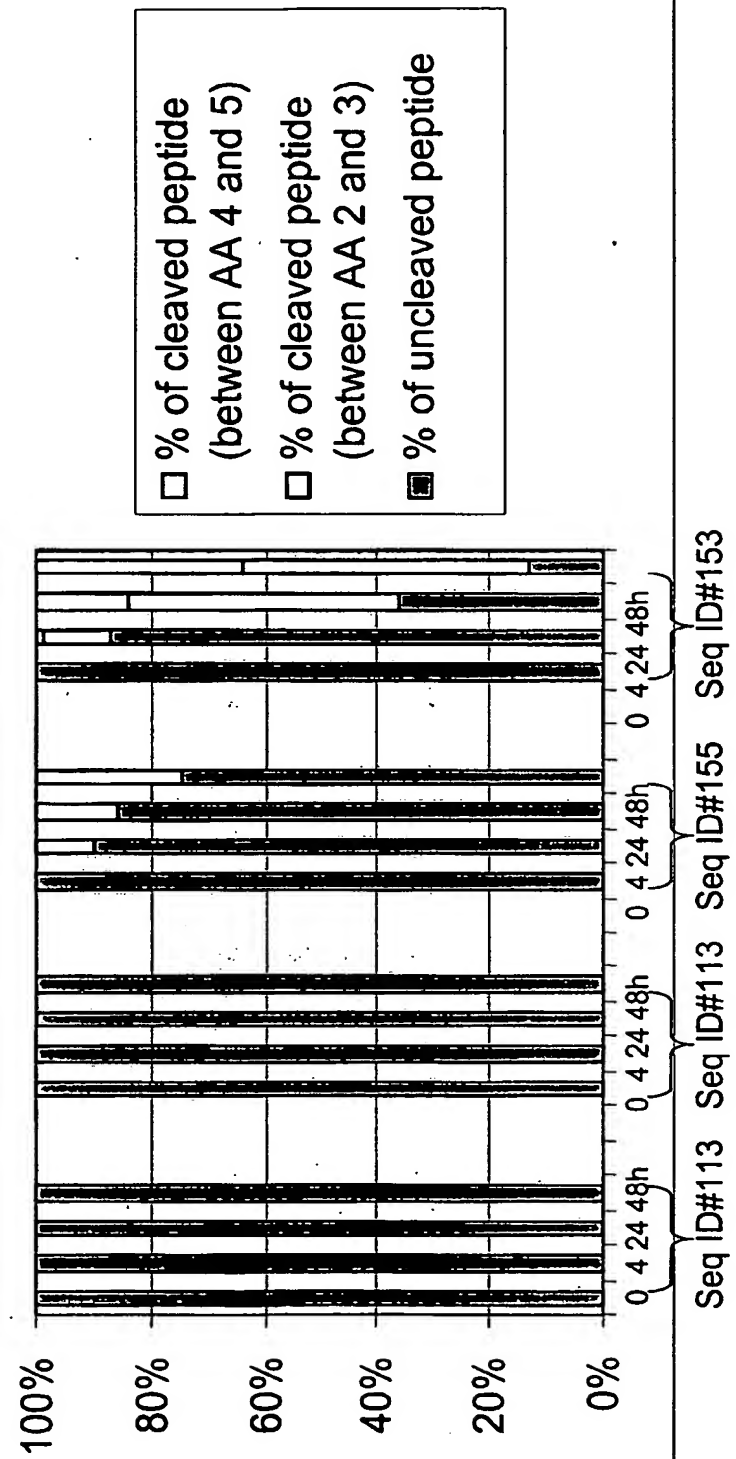
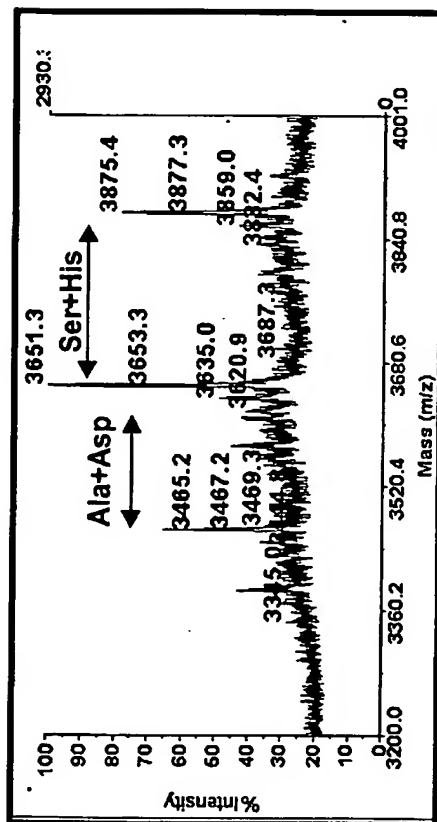
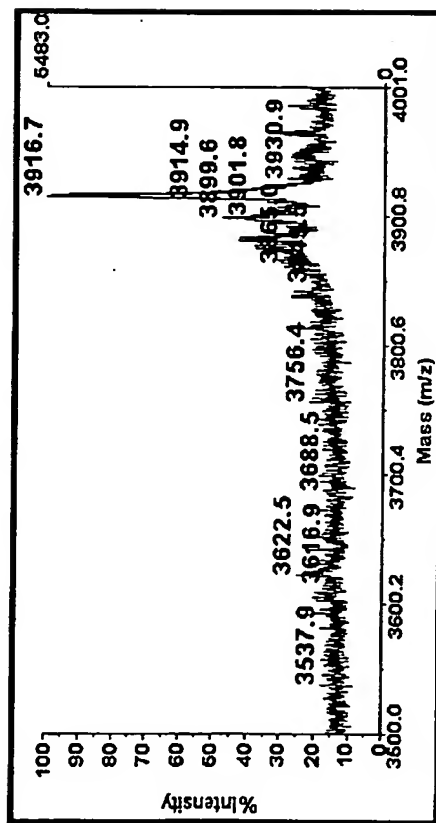


Figure 2a



**SEQ ID #153 is
cleaved by DPPIV.**



**SEQ ID#1 is not
cleaved
by DPPIV.**

Figure 2b

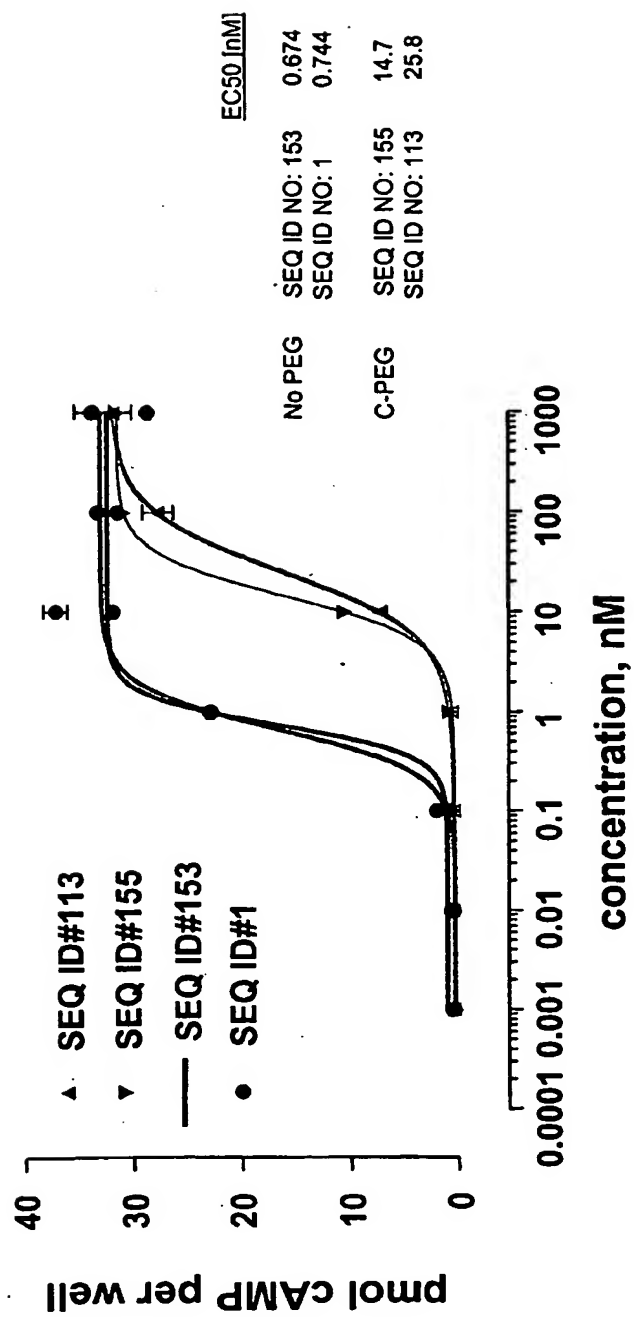


Figure 3

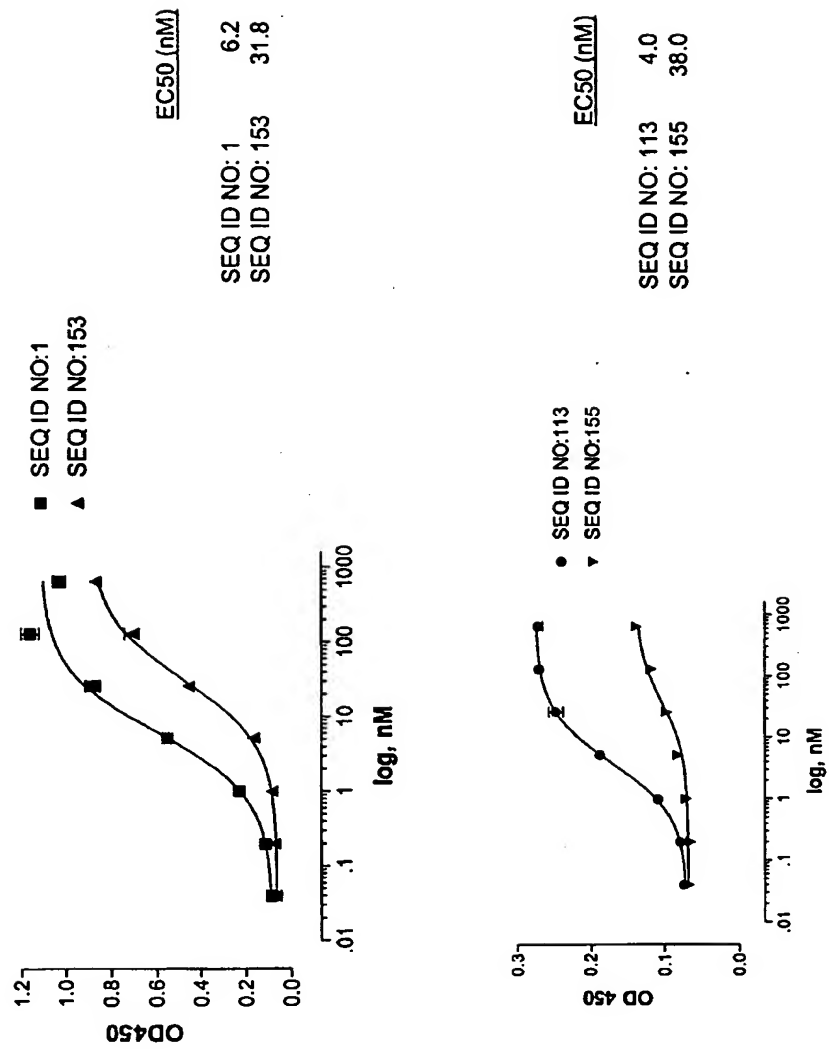
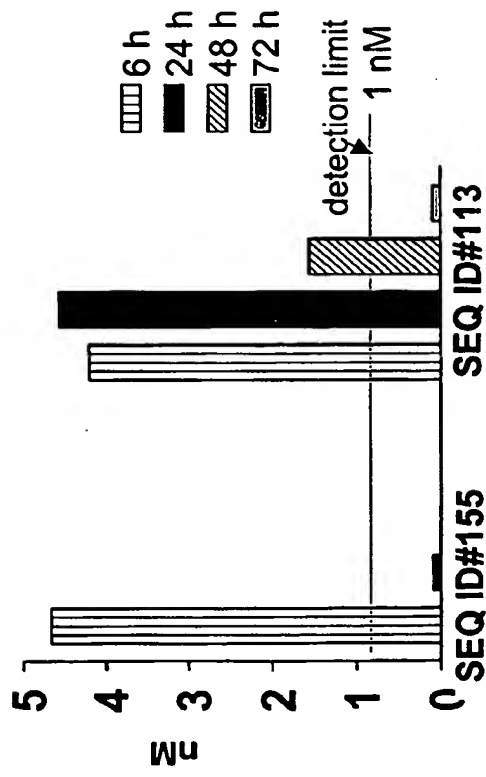


Figure 4



	6 hrs.	24 hrs.	48 hrs.	72 hrs.
SEQ ID#155	4.66±0.43	< 1	< 1	< 1
SEQ ID#113	4.21±0.25	4.57±0.37	1.56±0.12	< 1

Figure 5a

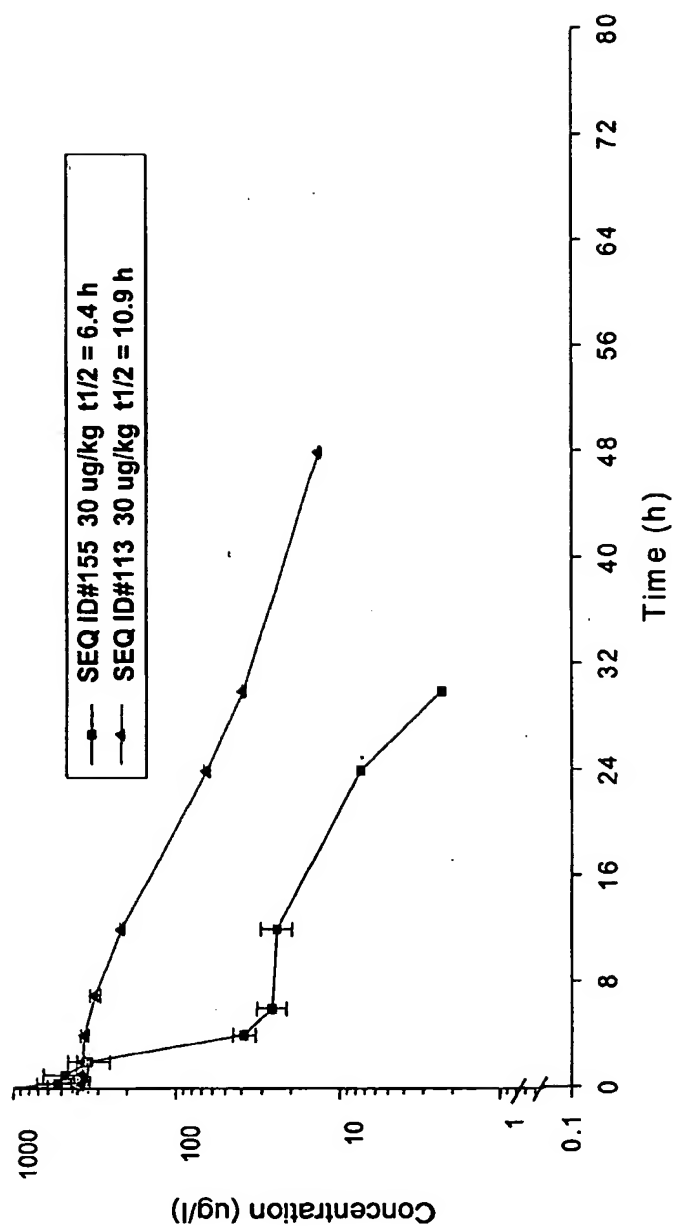


Figure 5b

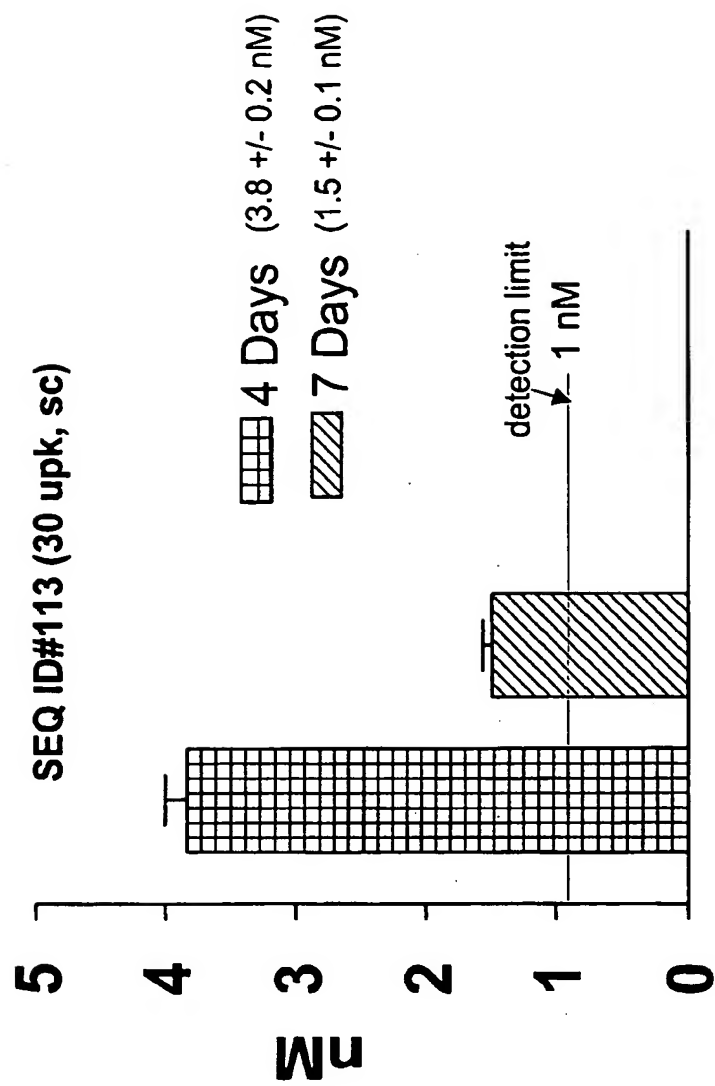


Figure 5c

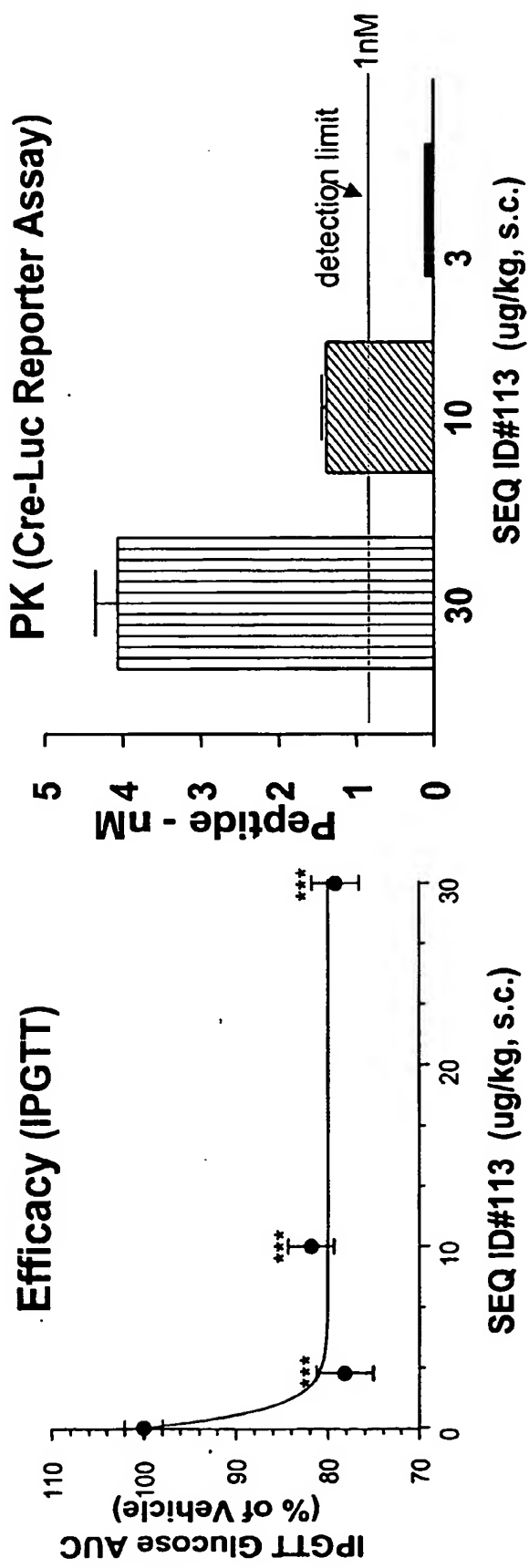


Figure 6a

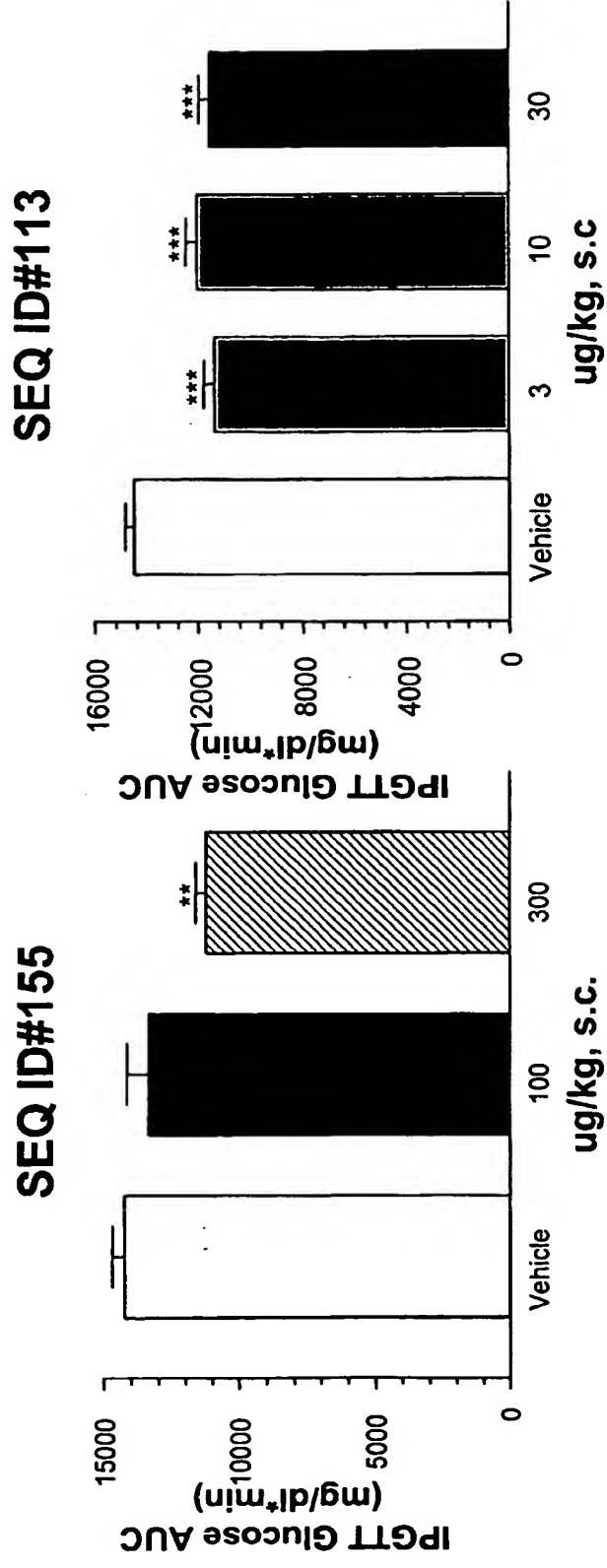
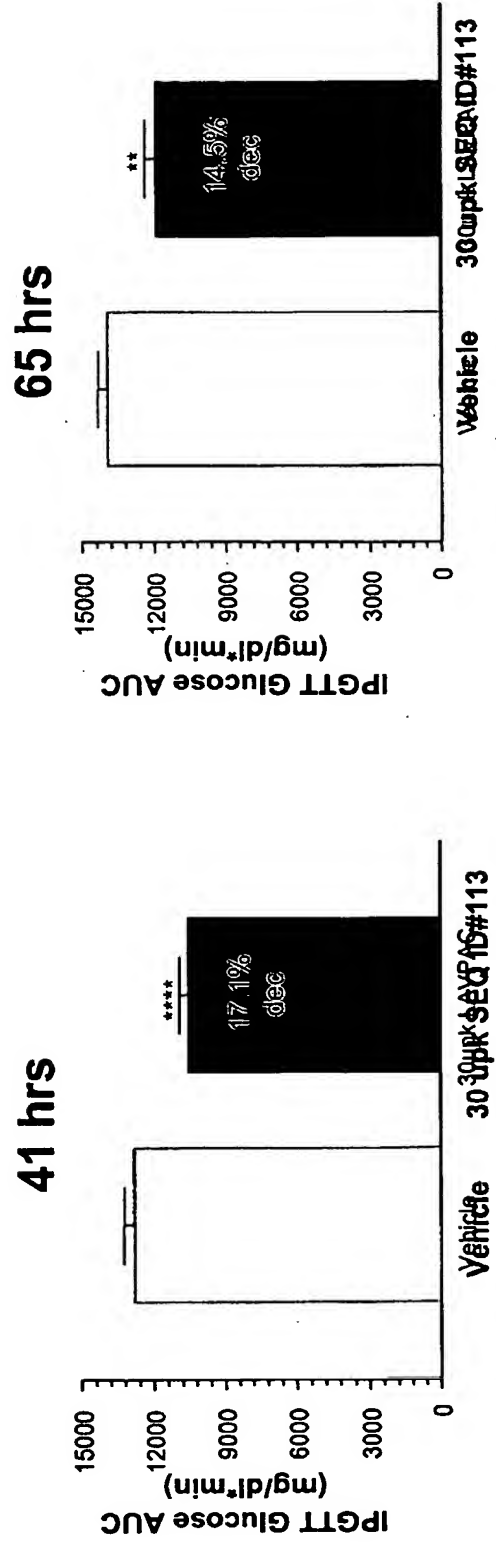


Figure 6b



	24 hrs.	41 hrs.	65 hrs.
SEQ ID#113	20±3*	17±2*	14.5±3*

Figure 6c